Title (en)

DEVICE FOR MONITORING THE SPATIAL AND TEMPORAL DYNAMICS OF THROMBIN

Title (de)

VORRICHTUNG ZUR ÜBERWACHUNG DER RÄUMLICHEN UND ZEITLICHEN DYNAMIK VON THROMBIN

Title (fr)

DISPOSITIF DE CONTRÔLE DE LA DYNAMIQUE SPATIO-TEMPORELLE DE THROMBINE

Publication

EP 3537158 A1 20190911 (EN)

Application

EP 17875993 A 20171112

Priority

- RU 2016147005 A 20161130
- RU 2017050116 W 20171112

Abstract (en)

The device for monitoring the spatial and temporal dynamics of thrombin that includes a temperature-controlled sealed chamber with a transparent window and a light trap, said chamber being filled with a fluid medium and designed to be capable of accommodating a cuvette containing a test sample of blood plasma, and into which a coagulation activating insert is placed, the latter having a substance which initiates the coagulation process applied to the butt end thereof, at least one means of illumination of the sample designed to be capable of receiving the light scattering signal from the sample and at least one first means of irradiation designed to be capable of exciting the fluorescence signal of a special marker that forms in the sample during the cleavage of a fluorogenic substrate previously added to the sample by one of the proteolytic enzymes of the coagulation system, a means of optical photo/ video registration of light scattering /irradiation from the sample, a means for adjustment of pressure in the temperature-controlled sealed chamber designed to be capable of maintaining a pressure inside the chamber exceeding the atmospheric one, at that the device includes at least one second means of irradiation of the sample designed to be capable of exciting a fluorescence signal of the said marker, at least one first means of irradiation that provides irradiation of the sample in a direction perpendicular to the cuvette plane, and at least one second means of irradiation that provides irradiation of the sample at an angle to the cuvette plane.

IPC 8 full level

G01N 33/86 (2006.01); **G01N 21/64** (2006.01); **G01N 33/52** (2006.01)

CPC (source: EP US)

C12Q 1/56 (2013.01 - EP); **G01N 21/47** (2013.01 - US); **G01N 21/51** (2013.01 - EP); **G01N 21/64** (2013.01 - US); **G01N 21/6486** (2013.01 - US); **G01N 21/82** (2013.01 - EP); **G01N 33/52** (2013.01 - US); **G01N 33/86** (2013.01 - EP US); C12Q 1/56 (2013.01 - US); G01N 21/0332 (2013.01 - EP); G01N 21/6408 (2013.01 - US); G01N 21/645 (2013.01 - EP); G01N 21/6456 (2013.01 - US); G01N 2021/6439 (2013.01 - US); G01N 2021/6476 (2013.01 - EP); G01N 2201/0231 (2013.01 - EP); G01N 2201/062 (2013.01 - US); G01N 2333/974 (2013.01 - EP US)

Cited by

CN110412001A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3537158 A1 20190911; **EP 3537158 A4 20191016**; **EP 3537158 B1 20201125**; EA 037013 B1 20210126; EA 201900269 A1 20191031; ES 2857686 T3 20210929; US 11237178 B2 20220201; US 2020292562 A1 20200917; WO 2018101861 A1 20180607

DOCDB simple family (application)

EP 17875993 A 20171112; EA 201900269 A 20171112; ES 17875993 T 20171112; RU 2017050116 W 20171112; US 201716464175 A 20171112